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TAMPER-RESISTANT BOX FOR VIDEOCASSETTE, COMPACT DISC
(CD) OR SIMILAR, AND SUBJECT FOR THE BOX.

The present invention relates to a box for a video cassette, compact disc (CD) or similar, with two side walls and
5 intermediate end walls, and a blank for the box.

The previously known boxes for video cassettes, CDs or similar normally consist of two parts connected in a hinge-like manner, so that the box parts can be pivoted away or towards one another when, for example, the video cassette is
10 to be removed from or placed in the box. Such boxes are provided with information about the respective video cassette, CD or similar, and buyers may arrange them in a rack, for example, according to a preferred system.

To buyers it is important that the box provides a packaging
15 which protects and, at the same time, provides information on the product inside the box. For distributors of e.g. non-played video cassettes it is important that the box is also provided with a seal, which indicates whether buyers have opened the boxes after buying them. The seal additionally

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protects against dust etc. A drawback of known boxes is that they are supplied ready-made, in their final form, so that the space required during transport and storage is undesirably increased. Moreover, the boxes are

5 disproportionately labour-intensive, due to, among other things, said hinging, and they are thereby expensive to produce. Further, the sealing, which is normally in the form of a wrapping of shrink plastic, and which is applied for example in a heat tunnel or by cellophanizing, is a

10 complicated process. This increases the production costs further.

Through the present invention, there is provided a box for a video cassette, compact disc (CD) or similar, and a blank for the box, whereby the above-mentioned defects and

15 disadvantages are essentially remedied. This has been realised by means of the features appearing from the characterizing part of the following two independent Claims. In said independent Claims concerning the box, is specified that the box is formed of a sheet-like blank, which comprises

20 the side walls, end walls and folding lines provided therefor, the end walls being positioned so, that one end wall extends between two of the folding lines formed to coincide with the longitudinal edges, facing one another, of the side walls, one terminal edge extends at the folding line

25 formed to coincide with a longitudinal edge of one of the side walls opposite the aforementioned longitudinal edges, and the remaining end walls extend at the respective folding lines formed to coincide with transversal edges of the side wall last mentioned, and a sealing means arranged so that it

30 shows whether the box has been opened, the sealing means being provided at two adjacent end walls. Further, it is stated in said independent Claim concerning the blank, that

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this contains the side walls, end walls and folding lines provided therefor, the end walls being positioned so that one end wall extends between two of the folding lines formed to coincide with the longitudinal edges, facing one another, of the side walls, one terminal edge extends at the folding line formed to coincide with a longitudinal edge of one of the side walls opposite the aforementioned longitudinal edges, and the remaining end walls extend at the respective folding line formed to coincide with transversal edges of the side wall last mentioned, and a sealing means arranged so that it shows whether the box has been opened, the sealing means being positioned at two adjacent end walls.

Thereby provision is made for the box, and for that matter also the blank for the box, among other things to be stored in a flat extent, so that these will be less space-demanding during transport and storage, and that the box or the blank comprises a sealing means, so that the previous sealing with wrapping of the box becomes unnecessary, and that the boxes are far easier to produce, so that the total production cost will be much smaller. Other favourable features of the invention appear from the present dependent Claims, and otherwise from the description.

In the following part of the description and with reference to the appended drawings, a preferred non-limiting embodiment of the present invention will be explained in further detail,

Fig. 1 showing a schematic view of a flat sheet-like blank for the formation of a box with a sealing means provided at two adjacent end walls of the blank;

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Fig. 2 showing a schematic perspective view of the box during completion, wherein portions have been left out in order better to show the sealing means before it has been put together into a sealing position;

- 5 Fig. 3 showing a schematic perspective view of the completed box with portions left out in order better to show the connected sealing means;

Fig. 4 showing a schematic perspective view of the completed box viewed towards a longitudinal terminal edge at the
10 sealing means; and

Fig. 5 showing a detailed section of the box viewed towards the end walls with the sealing means, as this is being brought together.

The sheet-formed blank 1, which is used in the forming of the
15 box, comprises two side walls 1, 2, end walls 3-6 positioned between the side walls 1, 2 in the complete box, and associated folding lines 7-11 provided therefor. The end walls 3-6 are positioned so in the blank, that one end wall 3 extends between two of the folding lines 7, 8 coinciding with
20 the opposite longitudinal edges of the side walls 1, 2, one terminal edge 4 extends at the folding line 9 coinciding with a longitudinal edge of one of the side walls 2 opposite the longitudinal edges mentioned above, and the remaining end walls 5, 6 extend at respective folding lines 10, 11
25 coinciding with transversal edges of the side wall 2 last mentioned. Additionally, the blank comprises a sealing means 12, 13 arranged so that it shows whether the box has been opened after completion, and which is positioned at two adjacent end walls 4, 5.

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The sealing means comprises a bow-like element 12 and a locking element 13 arranged thereto, each formed in a respective end wall 4, 5. The bow element 12 is provided in a portion near a transversal edge 24 of the end wall 4, facing the end wall 5, and in the flat condition of the blank, the locking element 13 extends as shown in Fig. 1, rounded towards the end wall 4 in the extension of the end wall 5. The locking element 13 can be bent upwards towards the end wall 5 at a folding line 31 formed therein. At a free end facing the bow element 12, the locking element 13 has a wedge-shaped portion 14 adapted to bear in a locking manner against the bow element 12 in the completed, unopened box. The wedge portion 14 is inserted into the bow element 12 when the box is being folded, after which a rear edge of the wedge portion 14 will prevent extraction of the locking element 13 from the bow element 12. Thereby the box can only be opened in that the bow element 12 is broken, so that, as mentioned, it shows if the buyer has opened the box after having bought it. This is done in the way that a coin, for example, is forced into an opening 15 against a reinforcing portion 16 of the locking element 13. Alternatively, an edge surface 16' can be influenced with a coin, and the end wall 5 thereby be forced towards an open position by breaking the bow element 12. The opening 15 is formed in the end wall 4, between the bow element 12 and a transversal edge 24 of the end wall 4 by the end wall 5, and the reinforcing portion 16 is formed between the wedge portion 14 and an adjacent folding edge 31 of the end wall 5.

To make it possible for the box to be held together after having been folded along the folding lines 7-11, the blank is formed, at the respective ones of the free longitudinal edges 34, 18 of the end walls 4, 6, and the free transversal edges

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20, 21 and the free longitudinal edge 19 of the side wall 1, and at the respective ends of the free transversal edges 25-30 of the end walls 3-6, with closing means 22, 23, for example resembling a snap-lock. The respective closing means 22, 23 are inserted one into the other after the folding, to hold the box together. After breaking the bow element 12, access is gained to the content of the box by repeated upward and downward pivoting of, for example, the side wall 1 or the end wall 5 of the box, so that the box is opened or closed. Otherwise, at least the end walls 4, 6 are reinforced by a number of transversal ribs 32, 33 or similar.

In the above is stated that the bow element 12 is broken through the insertion of for example a coin through the opening 15, and by subsequently influencing the edge surface 16'. Of course, it is possible for the bow element 12 to be broken by, the coin instead being forced directly into an opening possibly formed in association with the bow element 12. Alternatively the locking element 13 may be formed with a rupture line at the opening 15, so that the locking element 13 breaks and the bow element 12 remains unbroken. The bow element 12 may, for example, be secured directly to the internal face of the end wall 4, or it may remain as a bow element in an opening formed in the end wall 4.

It will be appreciated that the sealing means may be formed in a different manner from that shown in the figures. One of several possible alternatives is to glue a portion of the so-called locking element to the end wall 4. The sealing may then possibly be broken along a rupture line at the folding line 31 or in the locking element itself. Further, the closing means 22, 23 may have a configuration different from that shown. The blank is preferably in plastic, but any other

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suitable material may be used. The blank will be well suited for use in automated packaging of video cassettes etc.